AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application

Listing of the Claims

1. (currently amended) A method for controlling a production line ~~for the~~ that can simultaneously manufacture and/or ~~packaging~~ package at least two lots of contact lenses ~~which production line simultaneously processes at least two lots~~, the method comprising:

dividing at least a portion of the production line into a series of cells through which the contact lenses pass sequentially, [[and]]

providing a control system comprising at least three shift registers each containing information about each of said cells, including:

(a) a location shift register which indicates whether a cell should be empty or occupied,

(b) a lot data shift register which is a non-binary shift register and contains manufacturing and/or prescription data about the contact lens which should be in the cell and

(c) a condition shift register which provides an indication of the condition of the lens in the cell, and

simultaneously indexing all of said shift registers as a lens passes down the production line from one cell to the next cell.

2. (currently amended) A method as claimed in Claim 1 ~~which comprises~~ further comprising detecting the presence or absence of product in a cell and comparing the result with the information for that cell in the location shift register.

3. (currently amended) A method as claimed in Claim 2 ~~in which a~~ further comprising inserting a plurality of adjacent empty cells ~~is inserted~~ at the start and end of a manufacturing lot.

4. (currently amended) A method as claimed in Claim 3 ~~in which detection~~ wherein the detecting of said plurality of empty cells is used to trigger a processing event.

5. (currently amended) A method as claimed in Claim 4 ~~in which~~ wherein the processing event is selected from resetting a processing station, wiping data from a processing station and instigating a reporting action.

6. (currently amended) A method as claimed in ~~any preceding claim in which~~ Claim 1 further comprising inserting a gap comprising a predetermined number of empty cells ~~is inserted~~ positioned between successive manufacturing lots on the production line and the control system further comprises a gap defence mechanism including detectors and counters to monitor said gap as it proceeds down the production line.

7. (currently amended) A method as claimed in ~~any preceding claim in which information~~ Claim 1 wherein the manufacturing and/or prescription data from the lot data shift register is used to control the activity of a cell.

8. (currently amended) A method as claimed in ~~any preceding claim which comprises~~ Claim 1 further comprising the step of inspecting the product in a cell and/or monitoring the production activity in a cell and comparing the resulting data with data in the lot data shift register.

9. (currently amended) A method as claimed ~~any preceding claim in which information~~ in Claim 1 wherein information regarding the condition of the product in the condition shift register is used to trigger ejection of a product from the production line.

10. (currently amended) A method as claimed in Claim 9 ~~in which~~ wherein the ejection of product from the production line causes the location shift register to change to signify the cell is empty of product.

11. (new) A method as claimed in Claim 4 further comprising inserting a gap comprising a predetermined number of empty cells positioned between-successive manufacturing lots on the production line and the control system further comprises a gap defence mechanism including detectors and counters to monitor said gap as it proceeds down the production line.

12. (new) A method as claimed in Claim 4 further comprising inspecting the product in a cell and/or monitoring the production activity in a cell and comparing the resulting data with data in the lot data shift register.

13. (new) A production line for the simultaneous manufacture and/or packaging of at least two lots of contact lenses, the production line comprising:

a series of cells through which the contact lenses pass sequentially;

a control system comprising at least three shift registers each of which contain information about each of the cells, including:

(a) a location shift register which indicates whether a cell should be empty or occupied,

(b) a lot data shift register which is a non-binary shift register and contains manufacturing and/or prescription data about the contact lens which should be in the cell, and

(c) a condition shift register which provides an indication of the condition of the lens in the cell, and

a means for simultaneously indexing all of said shift registers as a lens passes down the production line from one cell to the next cell.

14. (new) A production line as claimed in Claim 13 further comprising a means for detecting the presence or absence of product in a cell and comparing the result with the information for that cell in the location shift register.

15. (new) A production line as claimed in Claim 13 further comprising a means for ejecting a product from the production line based upon information on the condition of the product in the condition shift register.